

Title (en)
SYSTEMS AND METHODS FOR FIBER OPTIC FOURIER SPECTROMETRY MEASUREMENT

Title (de)
SYSTEME UND VERFAHREN ZUR FASEROPTISCHEN FOURIER-SPEKTROMETRIEMESSUNG

Title (fr)
SYSTÈMES ET PROCÉDÉS DE MESURE PAR SPECTROMÉTRIE DE FOURIER À FIBRE OPTIQUE

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Application
EP 22737112 A 20220106

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- US 202163286033 P 20211204
- US 2022011461 W 20220106

Abstract (en)
[origin: WO2022150493A1] An example method injects a source light into a sensor cavity body, configured with an optical path including first and second reflecting surfaces, and structured to change the optical path distance between the first and second surface in response to a subject condition. Sensor reflection optical signals are received from the sensor cavity body, with first reflection signals from the first reflecting surface and second reflection signals from the second reflecting surface and routed to an interferometer with a first optical path to a first reflector and a second optical path to a second reflector. Interferometer reflector signals, including reflections of the sensor reflection signals from the first reflector and the second reflector are received and phase shift coupled into separate channel signals, including first channel signals, second channel signals, and third channel signals, mutually spaced with respect to phase. A computerized dynamic obtains dynamic measurement of the subject condition, through detecting changes in the optical path distance based on the first, second, and third channel signals.

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